



Pattie, C., Hartman, T. K., & Johnston, R. (2019). Not all campaigns are created equal: Temporal and spatial variability in constituency campaign spending effects in Great Britain, 1997–2015. *Political Geography*, 71, 36-46. <https://doi.org/10.1016/j.polgeo.2019.02.010>

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[10.1016/j.polgeo.2019.02.010](https://doi.org/10.1016/j.polgeo.2019.02.010)

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**Not all campaigns are created equal:  
Temporal and spatial variability in constituency campaign spending effects  
in Great Britain, 1997 – 2015**

**Key words:** Electoral geography; Constituency campaigning; Campaign spending effects

**Abstract:** Existing research on constituency campaigning focuses heavily on studies of single national elections, and cross-temporal variability in campaign effects is rarely addressed. Similarly, campaign effects for a party at a given election are assumed to be uniform across the territory of the relevant polity. But both assumptions are questionable. In this paper, we analyse constituency campaign spending effects at British General Elections from 1997 to 2015 to explore their stability across time and space. In doing so, we also evaluate the empirical utility of some of the arguments theorised by Fisher *et al.* (2011) to explain campaign variability. Our results suggest parts of the theory, while attractive, do not adequately account for the observed variability.

**Not all campaigns are created equal:  
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Research on constituency campaign effects at British general elections consistently shows they yield electoral dividends and are increasingly integrated into parties' national strategies (Denver and Hands 1997; Norris, 2000; Fisher and Denver, 2008). However, constituency campaigns are not equally effective for all parties, candidates, or elections. Labour and (especially) the Liberal Democrats have enjoyed relatively large campaign effects in their favour in past elections, while the Conservatives have often received little or no benefit (Pattie *et al.*, 1995; Denver and Hands, 1997; Fieldhouse and Cutts, 2009). Furthermore, incumbent candidates generally receive a smaller boost from their campaigns than do challengers (Jacobson, 1978, 1990; Pattie *et al.* 2017). Variability of outcome is, therefore, a known risk of constituency campaigns. Nor is this surprising, as parties and candidates vary in terms of the strategic situations they face and the resources, skills and capacities of their local campaign teams (and of the campaign teams working for their rivals).

Less attention has been paid, however, to other potential dimensions of variability in constituency campaign effectiveness. For instance, most studies look at constituency campaigning at single national elections; cross-temporal variability in campaign effects is rarely addressed. Similarly, local campaign effects for a party at a given election are assumed to be uniform across the territory of the relevant polity. However, both of these assumptions are questionable. In this paper, we analyse constituency campaign effects at British General Elections from 1997 to 2015 to explore their variability across time and space.<sup>1</sup> In doing so, we evaluate the empirical utility of some of Fisher *et al.*'s (2011) attempts to explain variations in campaign effectiveness. Our results suggest that some of their explanations do not adequately account for the observed differences; the search for answers continues.

### **Theorising variable constituency campaign effectiveness**

Temporal variations in constituency campaign effects might arise for a number of reasons. Most obviously, political parties do not campaign in a vacuum. They evaluate their own efforts and monitor rivals' tactics and methods, both to spot and respond to developing threats and to identify 'good practice' which they might apply themselves. Although the process is unlikely to be smooth or precise, the effectiveness of a party's local campaign efforts might oscillate over time, increasing as the party catches up with and surpasses the campaign tactics employed by rivals, decreasing as those rivals catch up in their turn.

The effectiveness of a party's constituency campaigns also rests on the activities undertaken within each constituency. Each local party faces distinct challenges with varying degrees of resourcing, resourcefulness and campaigning nous. Candidates' local campaign efforts can also affect their individual electoral fates, irrespective of how the national campaign fares (e.g. Johnston, 1987; Denver and Hands 1997; Pattie *et al.*, 1995; Benoit and Marsh, 2003; Whiteley and Seyd, 2003).

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<sup>1</sup> The following analyses focus on Great Britain (Scotland, Wales and England). Northern Ireland is excluded, as the party system there is very different from that in the rest of the UK.

Campaign contacts with voters can have a variety of effects. In some cases, a party's campaign activity might persuade floating voters to vote for it. But most campaign contacts at the level of the parliamentary constituency (our focus here) are relatively fleeting and uninformative (delivering a short leaflet, for instance, or asking whether a voter is thinking of supporting one's party: Denver and Hands, 1997, chapter 4; Johnston *et al.*, 2012, 318; for a candidate's-eye view, see Barwell, 2016, chapter 6). Active attempts at persuasion and argument on the doorstep are rare, and may be discouraged, for fear they alienate voters. Most such campaign contact, therefore, aims to mobilise existing supporters and those voters already leaning towards a party (ensuring as high a turnout of one's own supporters as possible), rather than at winning over new converts. In both cases, however, the net outcome is the same: effective and active campaigns should boost a party's vote share relative to its rivals. In line with the existing literature on constituency campaign effects, therefore, we hypothesise that:

*H<sub>1</sub>: Constituency campaign boosts:* All else being equal, the harder a party campaigns in a constituency the larger its vote share there will be.

That said, local campaign spending is not equally efficacious for all candidates. Spending by challengers is generally more effective than spending by incumbents (Jacobson, 1978, 1990; Pattie *et al.*, 2017). By mounting active constituency campaigns, challenger parties and candidates raise their local profiles and boost their vote, potentially by enough to unseat the incumbent. But the situation is not the same for incumbent parties and candidates fighting in seats they already hold. They have undoubted advantages over their opponents, not least through already-established reputations for constituency service (Wood and Norton, 1992; Fowler, 2018). But they may have little to gain from further local campaigning: indeed, extra campaign effort from an incumbent might actually be a response to greater electoral pressure from increasingly viable challengers – a sign of electoral weakness, not of strength (Jacobson, 1978). In light of this, and again in line with the existing literature, we also hypothesise that:

*H<sub>2</sub>: Challenger vs. incumbent effects:* All else being equal, parties defending seats will receive a smaller boost from their campaign efforts than will parties challenging in seats.

But the effectiveness of each constituency campaign is unlikely to be divorced from the wider national context facing each party in any given election. When the national electoral tide is running against a party, for instance, it is likely that even the most well-run local campaign will find it hard to make much headway. And when a party's national fortunes are in the ascendant, even its most inept local campaigners may enjoy better than expected fortunes.

Fisher *et al.* (2011) discuss how the national electoral context might generate variations in the effectiveness of constituency campaigning. One such factor, they argue, is the overall competitiveness of a general election: the closer the national contest, the more important campaigns in individual seats (especially, as we point out below, those in the most marginal constituencies) become, and hence the larger the impact constituency campaigns are liable to have. They also reason that elections, such as the 1997 UK General Election, that are widely expected in advance to produce dramatic turn-rounds in the overall outcome should see more effective campaigns, especially for the main party of opposition going into the contest. They point to the importance of an effective centrally co-ordinated campaign strategy, which links

to inter-party variations in campaign effectiveness (as noted above). Applying Fisher *et al.*'s arguments to recent British General Elections, we thus generate two more hypotheses:

*H<sub>3</sub>: Overall competitiveness.* The marginal returns to extra constituency campaign effort (at least for Labour and the Conservatives, as the main competitors for government) should be largest in highly competitive elections and smallest in uncompetitive ones.

*H<sub>4</sub>: Dramatic turnarounds.* The marginal returns to opposition party constituency campaign efforts should be larger in elections where dramatic turn-rounds are anticipated than in elections where no major change is expected.

Fisher *et al.* focus on the competitiveness of the overall national contest and how that might affect the efficacy of constituency campaigns. But how competitive constituency contests are also varies substantially *locally*. In some constituencies, one party is so far ahead of its nearest rivals that election results there are hardly in question. In other places, the gap between the incumbent party and the second-placed challenger is much closer and a relatively few extra votes either way could alter the election outcome.

In the remainder of the paper, we leverage this variation in constituency marginality to provide further insight into Fisher *et al.*'s hypothesis regarding the impact of competitiveness on campaign effects. Previous work has shown (unsurprisingly) that, partly as a function of central party coordination of local campaign effort (but also because most local campaign resources are local-sourced, and parties tend to have few resources in seats where they do badly), parties expend more campaign effort and resource in marginal seats (where it might help swing the result) than in safe ones (where it is unlikely to do so: see e.g. Denver and Hands, 1997; Pattie *et al.*, 1995; Johnston and Pattie, 2014; Pattie and Johnston, 2016).

To the extent that campaign spending is associated with improved vote shares, this implies that parties should see the greatest improvements in their vote in the most marginal seats, as these are where the parties will concentrate their resources. This could be the result of a simple linear effect. Crudely, if each extra pound spent on a local campaign wins a party  $x$  more additional votes, then we would expect to see more extra votes won where more resources are expended. But Fisher *et al.*'s hypothesis suggests something more: that the efficiency of the campaign increases as the contest becomes more competitive. In other words, the 'bang from its buck' a party obtains from each extra pound spent on its local campaign should be higher in more than in less marginal seats (see Johnston *et al.*, 2018). This implies an interaction between seat marginality and the effectiveness of campaigning:

*H<sub>5</sub>: Campaign and marginality interactions:* The more competitive a constituency is for a party, the greater the boost it should receive from each extra marginal increase in its campaign effort.

In line with  $H_2$  above, we expect this to be particularly clear in seats where a party is the local challenger, and less so where it is the incumbent.

Though plausible, these arguments have not been rigorously tested. Fisher *et al.*'s empirical analysis of the 2010 General Election, while sophisticated, cannot fully evaluate portions of their theory discussed above, since it provides only one case of a 'national election context'. Furthermore, even those aspects which can be tested within the context of a single election (for instance, that campaigns might be more effective in more marginal seats) would benefit from being tested across a range of different competitions, in order to check the robustness and generalizability of any such effect. In this paper, therefore, we follow Pattie and Johnston's (2009) lead and examine constituency campaigning over a range of elections – adding the 2010 and 2015 contests to the 1997, 2001 and 2005 elections studied previously. In addition, we also leverage constituency variations in electoral context (and in particular, variations in incumbency and constituency marginality) at particular general elections to further increase the number of different electoral contexts examined.

## Measuring the campaign effect

To conduct our analyses, we examine constituency election results at each UK General Election from 1997 to 2015, using a pooled data set (in which each case is a constituency in a particular election year). Thus, for each constituency, we have repeated measures of each party's vote share on the election year, and on the party's constituency campaign activity in that election, and we also have data on each party's performance in the constituency at the previous election. The dependent variables in our regression models are the constituency vote shares achieved by the Conservatives, Labour and the Liberal Democrats at each of the five General Elections. In line with the expectation that parties will experience different returns to their campaigns depending on whether they are local incumbents, we carry out separate analyses for seats defended by each party and for seats where the party was a local challenger.

Reflecting relatively long-standing social and economic geographies of party support, most parties tend to do well where they have previously done well and badly where they have previously struggled. We therefore control for each party's constituency vote share at the preceding General Election to take into account that underlying stability in the geography of party support.<sup>2</sup> To allow us to investigate the effects of constituency marginality on campaign effectiveness (in line with H<sub>5</sub>), we operationalise past strength as party constituency marginality. Where a party is defending a seat, marginality is the difference in vote shares at the previous election between the second-placed party then and the incumbent. Where a party is the local challenger, marginality is the difference between its vote share at the previous election and that of the local winner. In both cases, the marginality variable runs from a hypothetical minimum value of -100 (the least marginal result possible) to a maximum of 0 (the most marginal contest possible). This, combined with splitting the analyses between incumbent and challenger seats, both provides a proxy for party strength (in seats where a party is the challenger, the closer to zero the measure gets, the better the party did at the previous election; where a party is defending a seat, the more negative the marginality score – i.e. the further the seat is from being marginal for the party – the better it did at the previous

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<sup>2</sup> This is slightly complicated by periodic reviews of the boundaries of parliamentary constituencies, which mean the constituency map changes at various points in our analysis. In elections where a new set of constituencies is in use for the first time (as in the UK in 1997, in Scotland at the 2005 election, and in England and Wales in 2010) we therefore use estimates, prepared for the UK Press Association, of how the preceding election results would have looked had that contest also been fought in the new seats: these estimates are authoritative and widely used in analyses of UK General Elections (Rallings and Thrasher, 1997, 2007).

contest) and allows us to look at the effect of constituency marginality on campaign effectiveness, using interaction terms described below.

Our key independent variable measures the intensity of each party's constituency campaign at the election under investigation. Candidate campaign expenditure data for the (roughly) four-week 'short campaign' period between the date on which parliament is prorogued and the election date provides a standardised measure that is comparable across parties and time.<sup>3</sup> Candidate expenditure is subject to a legally enforced limit, which is a function of whether the constituency is a borough or a county seat (i.e. whether it is mainly urban or contains some rural areas) and of the size of its registered electorate: we express candidate spending in each seat as a percentage of that legal maximum. Though not a perfect indicator of campaign effort (Gordon and Whiteley, 1980; Fisher *et al.*, 2014), comparisons with other, independent measures of campaign intensity show that it is a good surrogate (Pattie *et al.*, 1994; Johnston and Pattie, 2006, 202; Denver and Hands, 1997, 242).<sup>4</sup>

Unlike other possible campaign intensity measures, candidate spending data are available for all candidates at almost every election we examine here. The partial exception is 2015, when local government electoral returning officers (to whom candidates must return their expenses) in some local authorities did not forward the data to the Electoral Commission.<sup>5</sup> Where the Commission did not have a return for a candidate in 2015, it entered £0 as the recorded expenditure. While in some cases a recorded campaign spend of £0 is real (e.g. where a party fields a candidate purely to get its name on the local ballot paper but has no expectation of either winning or even campaigning), most of the instances in the 2015 data are almost certainly missing values (in many cases clustered in the same local authorities; all candidates standing in particular seats are returned as having spent nothing even in seats where other information indicates that there were intense local campaigns – an inherently implausible situation). As we cannot differentiate between cases where the candidate really spent nothing, and cases where this is a missing value, we err on the side of caution and treat all cases where reported spending is £0 as missing (we do the same for a very small number of cases – 3 Labour and 2 Liberal Democrat – where candidate spending in 2015 was reported as being over the legal limit). In 2015, 6% of Conservative candidates had a reported short campaign expenditure of £0, as did 6% of Labour candidates and 17% of Liberal Democrats. We have compared constituencies where candidates 'short campaign' spending in 2015 is missing (or is reported as above 100%) with seats where non-zero candidate expenditure is reported: there are no systematic differences between them in terms of who won the seat at the 2010 election, or in terms of how marginal the seat was after that contest. While the specific problem described above affects only the 2015 constituency candidate spending data, we apply the same protocol regarding reported spending of £0 or over 100% of the limit to

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<sup>3</sup> Every candidate standing for election to the UK parliament is legally obliged to make a public declaration of how much he or she has spent on her campaign.

<sup>44</sup> It is possible that, as campaign spending increases, diminishing returns set in (the closer a party is to mobilising all its potential supporters locally, the greater the marginal effort likely to be required to add a few more to its vote). We have explored this possibility by adding a quadratic party spending term to our models. While the squared term is usually significant, the substantive effect is small: fit statistics such as  $R^2$  increase by only small amounts, and modelling the curve suggests that the deviation from a basically linear trend are generally very small. We have therefore omitted these experiments from our reported analyses and have reported only the linear effects of campaign spending.

<sup>5</sup> Since 2001, the Commission has compiled the candidate campaign data for the UK. However, this is not a statutory duty and returning officers are not legally obliged to forward the returns to the Commission: many more failed to do so in 2015 than at previous contests.

candidate spending in every election studied here to ensure as far as we can consistency and comparability across time in our analyses.

How we handle (and what we count as) missing cases has consequences for a key analytical decision: whether to include spending by all major parties in each equation, or whether to focus just on spending by the party whose vote is being modelled. Past research (e.g. Pattie *et al.*, 1995) shows that parties' campaign efforts, as well as boosting their own prospects, can also reduce the vote shares won by their rivals: including all major parties' campaign spending in each model would capture this. However, we opt to include only the campaign spending for the party whose vote is being modelled, and do so for two reasons. First, the problem of missing campaign spending data in 2015, described above, means we risk losing a relatively large number of cases by including all parties' campaign spending, with most of the lost cases concentrated in one election year. Including just the modelled party's spending in each equation maximises our sample size. Second, as our analyses hinge on interaction effects, we are reluctant to include all parties' spending in each model, as this would proliferate the number of interactions being modelled in each model, stretching our data too thinly. We are confident, however, that the paper's major findings are unaffected by this decision.<sup>6</sup>

To test our key hypotheses, we include not only the main effects for party campaign spending, previous party strength/marginality and for election year (with 1997 as the comparison), but also the interactions between party spending and past marginality (to test H<sub>5</sub>), party spending and election year (to test H<sub>3</sub> and H<sub>4</sub>) and the three-way interaction between campaign spending, election year and past marginality (allowing an assessment of whether the effect of campaign spending on vote share is moderated not only by the marginality of the constituency race but also by the election year).

### **Changing election contexts and the constituency campaign effect**

In this section, we analyse the impact of constituency campaigning on party vote share. As discussed above, we are particularly interested in temporal and spatial variations in the campaign effect, in line with Fisher *et al.*'s (2011) expectations, and we complement their focus on the varying context of the national campaign from election to election (and in particular on how close the national race was) with a further focus on the impact (if any) of constituency marginality on the effectiveness and efficiency of the constituency campaign.

We turn first to an assessment of H<sub>1</sub> (constituency campaign boosts) and H<sub>2</sub> (challenger vs. incumbency effects). To analyse them, we use the pooled data set (with each case a constituency-election year) and model each party's constituency vote share as a simple function of its constituency campaign expenditure (as a percentage of the legal maximum in the seat) and of how marginal the seat was for the party after the previous election (using the 'folded' version of marginality described above). In line with H<sub>2</sub>, we run separate analyses for seats where each party was the challenger (Table 1a) and where it was the incumbent (Table 1b).

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<sup>6</sup> We have re-run the key models including terms for campaign spending by the main opposition parties. While the results largely confirm the findings of previous research (by and large, the harder a party's opponents campaign in a seat, the less well the party does there), including opposition spending in the models makes little substantive difference to the core findings reported here. In the interests of parsimony and clarity, therefore, we have omitted opposition spending from the analyses reported in the paper.



The results support H<sub>1</sub> and H<sub>2</sub>, and confirm the conventional wisdom on the effects of constituency campaigning. Not surprisingly, past marginality is consistently and significantly related to a party's current vote share in unsurprising ways. The direct effect is significant and positive for Labour and the Conservatives in seats where they were the challengers (see Table 1a) and significant and negative for all three parties in their 'incumbent seat' models (Table 1b). Remember that this variable is coded so that the highest score (0) goes to the most marginal seats, and the lowest (negative) scores go to seats where the party was either a long way behind the local winner (in the challenger seats) or a long way ahead of the second placed party (in its 'incumbent' seats). In other words, the higher the marginality score in a 'challenger' seat, the better the party did at the previous election. But in incumbent seats, higher marginality scores indicate contests in which the party did worse at the preceding election. So these results tell us pretty much what we would expect: parties tend to do better where they have done best in the past.

But our main interest here is with the various campaign effects. In line with past research, the direct effects for the campaign spending variables substantially confirm H<sub>1</sub> (constituency campaign boosts) and H<sub>2</sub> (challenger/incumbent effects). Other things being equal, the more a party spent on its constituency campaign in seats where it was a challenger, the more votes it received (with the largest marginal effects being enjoyed by Labour and the Liberal Democrats). But, in line with H<sub>2</sub>, this was not true in seats defended by a party. There, the main effect for Conservative incumbents aside, the party's campaign spending generally had no direct effect on its electoral performance. For the Conservatives in the seats they were defending, meanwhile, the effect of campaign spending on vote share was significant but negative. In other words, the harder the party fought in its own seats, the worse it did. This may seem counterintuitive at first blush, but it is in fact consistent with Jacobson's (1978) classic account. Where they hold a seat, parties should hold the local advantage and if things are going well for them, should not need to campaign too hard; their candidates are likely to get considerable volumes of 'free' publicity through the local media for their activities in the years leading up to an election,<sup>7</sup> which is much less likely to be the case for their opponents. But if they are facing a strong challenge from a rival party and risk losing the seat, there is an incentive to campaign harder. So greater campaign effort in its own seats can be a sign of weakness for a party, not of strength (hence the null or negative campaign effects).

Thus far, our analyses support the repeated findings of the copious literature on constituency campaign effects. The harder parties campaign where they are the challenger in a seat, the better they do, other things being equal. But where they are defending a seat, increased campaign spending either has no effect on their electoral performance or can actually be associated with declining support. But do these effects vary depending on the changing contexts of the election year (H<sub>3</sub> and H<sub>4</sub>) or of the marginality of the constituency contest (H<sub>5</sub>)?

Of the five general elections analysed in this paper, two (1997 and 2001) were contests where the national result seemed a foregone conclusion before the election took place. In both cases, opinion polls when the election was called showed a substantial Labour lead over the Conservatives, sufficient to deliver a substantial Labour majority (Figure 1).<sup>8</sup> The remaining

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<sup>7</sup> Many MPs write regular columns for their local newspapers, for example.

<sup>8</sup> Data in the figure are taken from Anthony Wells' *UK Polling Report* website (<http://ukpollingreport.co.uk>).

We have taken all the polls reported on the day an election was called, and on the preceding and following days, and have calculated the average proportions saying they would vote Conservative or Labour.

elections looked, at the start of the campaign, like rather closer contests: the two major parties were virtually tied in the polls at the start of the 2005 and 2015 campaigns, while in 2010, the Conservatives led Labour, but by a relatively modest margin (at least compared to Labour's leads in 1997 and 2001).

If  $H_3$  (overall competitiveness) is correct, therefore, we would expect more substantial constituency campaign effects in 2005, 2010 and 2015 (and especially in the first and last of these elections) than in either 1997 or 2001. Militating against this to some extent, if  $H_4$  (dramatic turnarounds) is correct, we might anticipate a stronger campaign effect in 1997 than in the remaining contests, as this contest produced one of the most dramatic turnarounds of any recent UK election. The Conservatives, who had been in government since 1979, lost 178 seats and saw their vote fall by 11 percentage points, while Labour gained 145 seats for an increase of almost 9 percentage points in its vote share, giving it an unusually large Parliamentary majority. No other election in the series analysed here produced such a dramatic turnaround in party fortunes. That said, the 2010 election could arguably also be thought of as one where a 'dramatic turnaround' might have been expected, as this election was widely anticipated as marking the end of 13 years of Labour majority government, even though the election itself was expected to be a close contest (Fisher et al, 2011, seem to see the 2010 contest in these terms).

Below the national level, and in line with  $H_5$  (campaign/marginality interactions), we expect each party to enjoy more substantial campaign effects in its most marginal seats than in its less marginal ones. To re-iterate, we expect this to be the outcome of not just more campaign resources being thrown at the marginals (though there is substantial research showing that this is the case) but also of the more efficient use of those resources in the most marginal constituencies.

To test these additional expectations, we re-run the regression models reported in Table 1, but add further variables for election year (employing dummy variables for each year, with 1997 as the comparison) and for the two- and three-way interactions between campaign spending, marginality and election year. The interactions of the election year dummy variables with previous marginality in a constituency capture the effects of general trends in party support over the course of each Parliament which cannot be attributed to campaign effects in the final weeks before the next election. The interactions of election year and constituency campaign spending capture how much – if at all – constituency campaign effects changed from one election to another, other things being equal. The interactions between campaign spending and marginality test whether the efficiency of the constituency campaign varies according to local conditions. And the three-way interaction between margin, election year and spending tests whether any moderating effect of marginality on campaign effectiveness varies from election year to election year. The models for seats where parties were the local challengers are displayed in Table 2: those for their incumbent seats are in Table 3.

To aid interpretation of the interaction effects, we graph predicted vote shares from each model. Predictions for seats where each party was a challenger are shown in Figures 2, 3 and 4 (for the Conservatives, Labour and the Liberal Democrats respectively), while predictions for seats where each party was the incumbent are given in Figures 5 (Conservatives), 6 (Labour) and 7 (Liberal Democrats).<sup>9</sup> Each figure shows the predictions for each election in a

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<sup>9</sup> The figures were produced in R using the sjPlot and ggplot2 packages (Lüdtke, 2018; Wickham, 2016; R Core Team, 2018).

separate panel. The vertical axis in each panel shows the party's predicted vote share, while the horizontal axis shows the party's constituency campaign spending percentage. To illustrate the effect of previous marginality, we show trend lines and confidence intervals for three different situations: for seats with a marginality score of -60 (shown as a solid line: where the party was a challenger, this means that at the preceding election it was 60 points behind the winner; where it was an incumbent, it was 60 points ahead of the second-placed party); seats with a marginality score of -30 (a dotted line); and the most marginal seats, with a marginality score of 0 (a dashed line).

Here, we break new analytical ground, and show that electoral context (particularly at the constituency level) importantly modifies the conventional wisdom on campaign effects. Not all campaigns are equal. To see why, we need to look both at the interaction effects involving campaign spending in Tables 2 and 3 and at the predictions graphed in Figures 2 through 7.

What is immediately clear is that, in seats where a party is the local challenger, the effectiveness of its local campaign depends largely on the competitiveness of the seat. For all three parties in all election years covered, the steepest positive slopes for the relationship between campaign spending and party vote share occur in the most marginal seats. The less marginal the constituency for the party, the shallower the regression slope, and in the least marginal constituencies considered here the slope is in some cases either flat (suggesting no campaign effect on performance) or even negative (suggesting that the harder a party campaigns in seats where it has little or no chance of winning, the worse it does). In most of the graphs displayed in Figures 2, 3 and 4, the confidence intervals for our three marginality conditions rarely if ever overlap, suggesting that these differences are statistically significant. Challenger parties tend to do better in marginal seats than in seats where they have no chance. But (supporting H<sub>5</sub>) while their campaign efforts in the former can further enhance their prospects, in the latter the marginal effects of campaigning are weaker – or even negative.

Where parties are defending seats, the impact of marginality on campaign effectiveness is not as clear-cut, however. Not surprisingly, all three parties did best in the least marginal of their own seats (these were, by definition, the seats where they had previously recorded some of their best results). But for the Conservatives and the Liberal Democrats, the regression lines for our three 'marginality' conditions do not generally differ significantly from zero, as indicated by the broad confidence intervals. The central predictions for those seats where the party expends maximum campaign effort tend to be within the confidence interval for those seats of similar marginality where it expends least effort (compare Figures 5 and 6): for the Liberal Democrats, the small number of defended seats means the confidence intervals are often particularly wide.

Things are somewhat more complicated when we look at Labour's campaign in seats that party was defending, however (Figure 6). There (and similarly for the Conservative and Liberal Democrat campaigns in their defended seats), in 1997 and 2001 there is little clear evidence of Labour campaign effects, no matter how safe or marginal the seat. In 2010 there are signs that Labour's campaign effort yielded extra votes in those of its own seats which were in our 'middling' marginality group (though in the most and least marginal seats modelled, the confidence intervals reveal that the slopes are not significant). In 2005, however, Labour experienced positive returns to increased campaign effort in the most marginal of the seats it was defending, while in both 2005 and 2015 its vote share tended to go down as it campaigned harder in very or moderately safe Labour seats (suggesting that

Jacobson's insight regarding the impact of campaigning in one's own seats might also in some cases be moderated by how close the local contest is).

Overall, however, our analyses suggest support for H<sub>5</sub>. This is especially true in seats where a party was the local challenger in an election. There, the more marginal the seat, the larger the campaign 'boost' a party enjoyed from marginally increasing its campaign effort.

What of the hypotheses drawn from Fisher *et al.*'s (2011) arguments concerning the influence of the national campaign context on constituency campaign effects? There is certainly evidence that constituency campaign effects can vary from election year to election year, at least in seats where a party is the local challenger: in those seats, the coefficients for the interactions between campaign spending and election year are all significant for all three parties. However, the patterns are not as straightforward as suggested by H<sub>3</sub> (overall competitiveness) or H<sub>4</sub> (dramatic turnarounds). Holding other factors constant, Conservative campaigning in seats where it was the challenger yielded larger marginal effects than in 1997 in each subsequent election – though the relative size of the boost was not much larger in the more marginal national contests of 2005, 2010 and 2015 than was the case in the considerably less competitive national race of 2001. For Labour and the Liberal Democrats, meanwhile, the 1997 campaign effect in seats where they were challengers seems to have been a high water mark, other things being equal: in subsequent election years, the interactions between campaign spend and election year suggest that the marginal effect of campaigning diminished somewhat (and again, with little clear connection to how competitive the national contest was).

In seats defended by each of the major parties, however, the interactions between election year and campaign spending and the three-way interactions including past marginality were almost invariably insignificant. That suggests that where parties were the local incumbent, the national election context did not make much difference to the (non-)effect of their local campaign efforts (an impression which, as noted above, is largely borne out by inspection of Figures 5 and 7). Overall, therefore, it is hard to see much consistent evidence here for H<sub>6</sub>: the competitiveness of the national contest did not consistently have the predicted impact on constituency campaign effects.

The 'dramatic turnarounds' hypothesis (H<sub>4</sub>) fares slightly better, at least for Labour and Liberal Democrat campaigns in the most marginal of the constituencies where those parties were challengers (see Figures 6 and 7). For these parties in those seats, the steepest regression lines (and hence the most striking positive campaign effects) occurred in the ultra-marginal seats in 1997, the election which most closely approximates a 'dramatic turnaround' contest. But 2010, which in some ways could be considered a 'dramatic turnaround' contest, does not show such clear-cut patterns: the three trend lines for Labour predicted vote in seats where the party was a challenger in that election overlap very substantially, while the equivalent lines for the Liberal Democrats in 2010 are largely parallel, suggesting that differences are to do how competitive the party was in each group of seats, not with differences in how local campaign efforts 'worked' for the party under different marginality conditions.

## Conclusions

While there is now widespread agreement that local campaign efforts can and do pay electoral dividends, less attention has been devoted to accounting for fluctuations over time and place in the marginal benefits they bring. In this paper, we demonstrate that these fluctuations can be relatively substantial. While the net impact of each party's constituency campaigning on its vote share is generally positive across time and across different local contexts (as captured by the marginality of the constituency contest and whether a party was the local incumbent), the size of the marginal effect varies. Furthermore, in some situations the net effect of a party's campaign disappears, while in others (especially in uncompetitive seats) its net campaign effect, perversely, can even be negative (the harder it campaigns locally the fewer votes it wins, other things being equal). Parties ignore their constituency campaigns at their peril, therefore, and wise parties co-ordinate their local resources with care to maximise their returns. But wise parties should also not take the efficacy of their constituency ground wars for granted. Just like the value of stocks and shares, the returns to local campaigning can go down as well as up.

Accounting for these fluctuations is much more challenging, however. In the course of the paper we have looked at two plausible potential explanations derived from Fisher et al.'s (2011) arguments: the overall competitiveness of the national contest; and dramatic national election turnarounds. Neither receives unambiguous support. While they seem to 'fit' some parties at some of the elections, none provides a truly satisfactory explanation, and in every case there are notable exceptions, where the purported effect is expected but is not seen. However, we see clearer support not only for the 'conventional' finding that constituency campaign spending is more beneficial for a party where it is the local challenger than where it is the incumbent defending a seat, but also for the moderating effect of constituency marginality. Constituency campaign efforts seem to help parties to win more votes in marginal seats where they are the challenger than in seats where their prospects are less favourable or in seats they already hold. In part, this is a simple function of more resources being expended on such marginal races. But our results show (for the first time) that there is something more going on. The campaign effect in these marginals is not just a function of more resources but also of the more efficient use of those resources. Parties get more campaign bang for their buck in seats where they lost at the previous election by narrow margins than elsewhere. The efficiency of campaign spending varies according to the marginality of the seat – and in rational and predictable ways.

Given the results reported above, we are sceptical of general explanations concerning the national electoral context for fluctuating campaign effects. Rather, we suspect the answer lies partly in more ephemeral and less generalizable factors, reflecting the quality of each party's campaign, and what other parties are doing at the same time. It is not enough, for instance, to set and achieve plans for contacting a set number of voters in key target seats. Who is contacted, and what messages they are given, is liable to be important too. But, more than that, the answer lies in local geographies of party support: campaigns matter more and have larger effects in places where the race is close than where it is not – and particularly for the local challenger most likely to unseat the incumbent in those races. Local geography matters.

**Acknowledgements**

We are grateful to the editor, Halvard Buhaug, and the anonymous referees for their valuable comments on earlier drafts of the paper.

## References

- Barwell, G. 2016. *How to Win a Marginal Seat: My Year Fighting for my Political Life*. London: Biteback Books.
- Benoit, K. and Marsh, D. 2003. Campaign spending effects in the Irish local election of 1999. *Party Politics*. 9, 561-582.
- Denver, D. and Hands, G. 1996. Constituency campaigning in the 1992 General Election: the peculiar case of the Conservatives. In Farrell, D.M., Broughton, D., Denver, D. and Fisher, J. (eds.). *British Elections and Parties Yearbook 1996*. London: Frank Cass.
- Denver, D. and Hands, G. 1997. *Modern Constituency Electioneering: Local Campaigning in the 1992 General Election*. London: Frank Cass.
- Fieldhouse, E. and Cutts, D. 2009. The effectiveness of local party campaigns in 2005: combining evidence from campaign spending and agent survey data. *British Journal of Political Science*. 39: 367-388.
- Fisher, J., Cutts, D. and Fieldhouse, E. 2011. The electoral effectiveness of constituency campaigning in the 2010 British General Election: the 'triumph' of Labour? *Electoral Studies*. 30: 816-828.
- Fisher, J and Denver, D. 2008. From foot-slogging to call centres and direct mail: a framework for analysing the development of district-level campaigning. *European Journal of Political Research*. 47: 794-826.
- Fisher, J., Johnston, R., Cutts, D., Pattie, C. and Fieldhouse, E. 2014. You get what you (don't) pay for: the impact of volunteer labour and candidate spending at the 2010 British General Election. *Parliamentary Affairs*. 67, 804-824.
- Fowler, A. 2018. A Bayesian explanation for the effect of incumbency. *Electoral Studies*. 53, 67-78.
- Gordon, I. and Whiteley, P. 1980. Comment: Johnston on campaign expenditure and the efficacy of advertising. *Political Studies*. 28, 293-294.
- Jacobson, G. 1978. The effects of campaign spending in Congressional elections. *American Political Science Review*. 72: 469-491.
- Jacobson, G. 1990. The effects of campaign spending in House elections: new evidence for old arguments. *American Journal of Political Science*. 34: 334-362.
- Johnston, R.J. 1987. *Money and Votes: Constituency Campaign Spending and Election Results*. London: Croom Helm.
- Johnston, R., Cutts, D., Pattie, C. and Fisher, J. 2012. We've got them on the list: contacting, canvassing and voting in a British general election campaign. *Electoral Studies* 31, 317-329.
- Johnston, R., Hartman, T. and Pattie, C. 2018. Spending, canvassing and electoral success in marginal constituencies. England and Scotland in 2017. *Journal of Elections, public Opinion and Parties*. (in press).
- Johnston, R. and Pattie, C. 2006. *Putting Voters in Their Place: Geography and Elections in Great Britain*. Oxford: Oxford University Press.

- Johnston, R. and Pattie, C. 2014. *Money and Electoral Politics: Local Parties and Funding in General Elections*. Bristol: Policy Press.
- Lüdtke, D. 2018. *sjPlot: Data Visualisation for Statistics in Social Science*. <https://CRAN.R-project.org/package=sjPlot>.
- Norris, P. 2000. *A Virtuous Circle: Political Communications in Post-industrial Societies*. Cambridge: Cambridge University Press.
- Pattie, C., Hartman, T. and Johnston, R. 2017. Incumbent parties, incumbent MPs and the effectiveness of constituency campaigns: evidence from the 2015 UK general election. *British Journal of Politics and International Relations*. 19, 824-841.
- Pattie, C. and Johnston, R. 2009. Still talking, but is anyone listening? The changing face of constituency campaigning in Britain, 1997-2005. *Party Politics*. 15, 411-434.
- Pattie, C. and Johnston, R. 2016. 'Resourcing the constituency campaign in the UK'. *Party Politics*, 22(2), 203-214.
- Pattie, C., Johnston, R. and Fieldhouse, E. 1995. Winning the local vote: the effectiveness of constituency campaign spending in Great Britain. *American Political Science Review*. 89: 969-983.
- Pattie C., Whiteley P., Johnston R. and Seyd, P. 1994. Measuring local campaign effects: Labour party constituency campaigning at the 1987 General Election. *Political Studies*. 42, 469-479.
- R Core Team. 2018. *R: A Language and Environment for Statistical Computing*. Vienna: R Foundation for Statistical Computing, <https://www.R-project.org/>
- Rallings, C. and Thrasher, M. 1997. *Media Guide to the New Parliamentary Constituencies*. Plymouth: Local Government Chronicle Elections Centre.
- Rallings, C. and Thrasher, M. 2007. *Media Guide to the New Parliamentary Constituencies (Fifth Periodical Review)*. Plymouth: Local Government Chronicle Elections Centre.
- Whiteley, P. and Seyd, P. 2003. Party Election Campaigning in Britain: the Labour party. *Party Politics*. 9, 637-652.
- Wickham, H. 2016. *ggplot2: Elegant Graphics for Data Analysis*. New York: Springer-Verlag.
- Wood, D.M. and Norton, P. 1992. Do candidates matter? Constituency-specific vote changes for incumbent MPs, 1983-1987. *Political Studies*. 40, 227-238.



Table 1: Campaign spending and party vote share 1997-2015: OLS models

	Con % vote		Lab % vote		LD % vote	
A) Seats party lost at previous election	B	SE	B	SE	B	SE
Constant	26.052	0.599**	12.433	0.389**	9.517	0.459**
Party margin at previous election	0.338	0.011**	0.234	0.017**	0.015	0.011
Party short campaign spend	0.131	0.006**	0.294	0.007**	0.242	0.005**
R <sup>2</sup>	0.681		0.622		0.536	
N	1920		1415		2759	
B) Seats party won at previous election	B	SE	B	SE	B	SE
Constant	53.828	1.077**	39.189	1.015**	38.788	5.682**
Party margin at previous election	-0.233	0.018**	-0.418	0.014**	-0.198	0.072**
Party short campaign spend	-0.140	0.012*	0.009	0.011	0.015	0.059
R <sup>2</sup>	0.255		0.380		0.025	
N	1175		1677		226	

Standard errors in brackets. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$

Table 2: Modelling the effect of campaign spending on vote share in seats where party is the challenger, 1997-2015: OLS regressions

	Con % vote		Lab % vote		LD % vote	
	B	SE	B	SE	B	SE
Constant	24.169	1.619**	4.852	1.138**	8.341	1.173**
Party margin at previous election	0.291	0.049**	-0.249	0.118*	-0.0002	0.028
Party short campaign spend	0.059	0.022**	0.432	0.015**	0.363	0.016**
Election year (comparison = 1997)						
2001	3.034	2.722	13.708	1.572**	4.272	1.490**
2005	3.748	2.421	13.338	1.512**	8.724	1.606**
2010	1.997	2.552	5.771	1.369**	13.081	1.583**
2015	2.454	1.961	8.214	1.308**	-3.385	1.398*
Party margin * party spend	0.001	0.001	0.011	0.002**	0.005	0.000**
Year 2001*party margin	-0.009	0.066	0.427	0.143**	0.032	0.034
Year 2005 * party margin	0.023	0.064	0.485	0.134**	0.062	0.308
Year 2010 * party margin	-0.016	0.069	0.446	0.132**	0.179	0.042**
Year 2015 * party margin	0.073	0.061	0.421	0.125**	0.045	0.039
Year 2001 * party spend	0.073	0.033*	-0.237	0.028**	-0.081	0.022**
Year 2005 * party spend	0.100	0.031**	-0.296	0.029**	-0.117	0.024**
Year 2010 * party spend	0.129	0.032**	-0.199	0.026**	-0.211	0.022**
Year 2015 * party spend	0.103	0.028**	-0.178	0.020**	-0.180	0.024**
Year 2001*party margin * party spend	-0.0004	0.001	-0.005	0.003	-0.001	0.001
Year 2005 * party margin * party spend	0.001	0.001	-0.010	0.003**	-0.003	0.001**
Year 2010 * party margin * party spend	0.001	0.001	-0.014	0.003**	-0.004	0.001**
Year 2015 * party margin * party spend	0.001	0.001	-0.009	0.002**	-0.002	0.001
R <sup>2</sup>	0.66		0.692		0.774	
N	1920		1415		2759	

Standard errors in brackets. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$

Table 3: Modelling the effect of campaign spending on vote share in seats where party is the incumbent, 1997-2015: OLS regressions

	Con % vote		Lab % vote		LD % vote	
	B	SE	B	SE	B	SE
Constant	20.517	4.167**	53.143	3.671**	106.906	61.756
Party margin at previous election	-0.702	0.156**	-0.435	0.102**	2.803	3.858
Party short campaign spend	0.116	0.046*	0.006	0.044	-0.663	0.637
Election year (comparison = 1997)						
2001	12.292	6.864	-17.043	5.293**	-63.699	64.687
2005	19.121	6.131**	-23.935	4.816**	-52.614	66.605
2010	20.742	5.572**	-24.847	4.412**	-96.054	62.943
2015	25.251	4.774**	-14.753	4.397**	-99.340	61.927
Party margin * party spend	0.003	0.002	0.001	0.001	-0.030	0.040
Year 2001*party margin	-0.127	0.411	-0.128	0.134	-3.001	4.014
Year 2005 * party margin	0.155	0.300	-0.286	0.132*	-2.699	4.101
Year 2010 * party margin	0.187	0.230	-0.082	0.130	-4.281	3.902
Year 2015 * party margin	0.264	0.183	-0.339	0.139*	-3.415	3.853
Year 2001 * party spend	-0.0001	0.076	0.065	0.062	0.703	0.670
Year 2005 * party spend	-0.064	0.071	0.077	0.058	0.543	0.692
Year 2010 * party spend	-0.070	0.063	0.043	0.054	1.037	0.652
Year 2015 * party spend	-0.143	0.054**	0.042	0.056	0.856	0.640
Year 2001*party margin * party spend	0.003	0.005	0.001	0.002	0.032	0.042
Year 2005 * party margin * party spend	-0.0003	0.004	0.003	0.002	0.026	0.043
Year 2010 * party margin * party spend	-0.001	0.003	-0.001	0.002	0.046	0.041
Year 2015 * party margin * party spend	-0.002	0.002	0.006	0.002**	0.033	0.041
R <sup>2</sup>	0.703		0.691		0.553	
N	1175		1677		226	

Standard errors in brackets. \*  $p \leq 0.05$ ; \*\*  $p \leq 0.01$

Figure 1: Average Conservative and Labour national opinion poll ratings at the start of the election campaign, 1997-2015

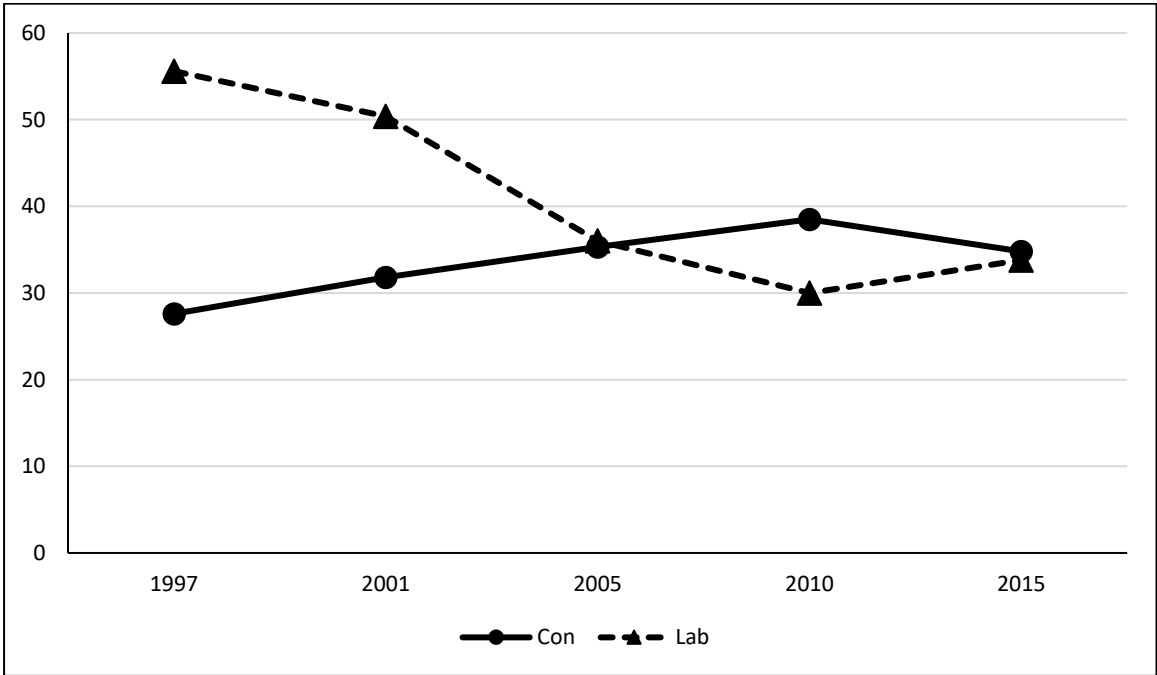


Figure 2: Predicting Conservative vote share in seats where the party is a challenger, 1997-2015: Visualising interactions

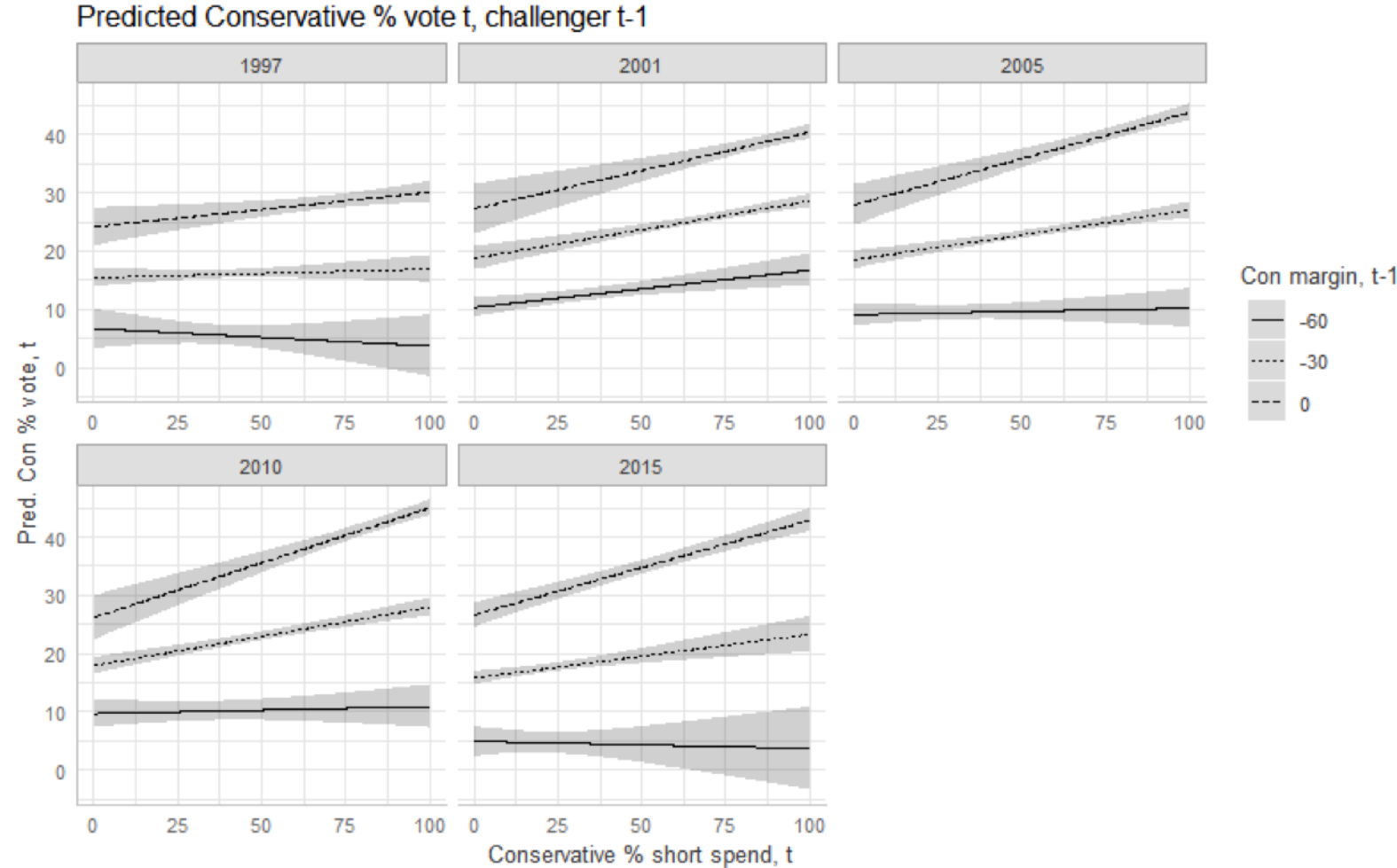


Figure 3: Predicting Labour vote share in seats where the party is a challenger, 1997-2015: Visualising interactions

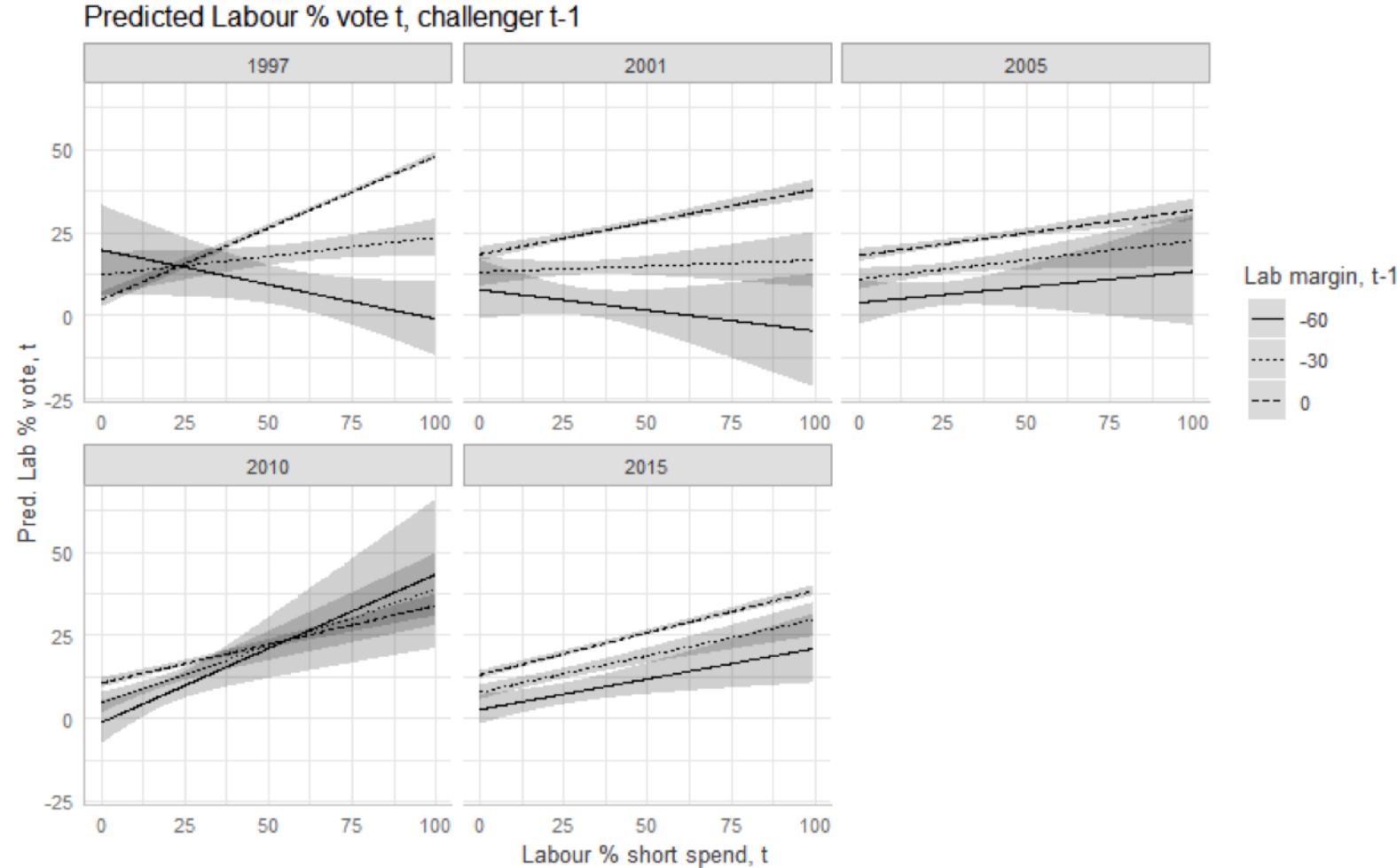


Figure 4: Predicting Liberal Democrat vote share in seats where the party is a challenger, 1997-2015: Visualising interactions

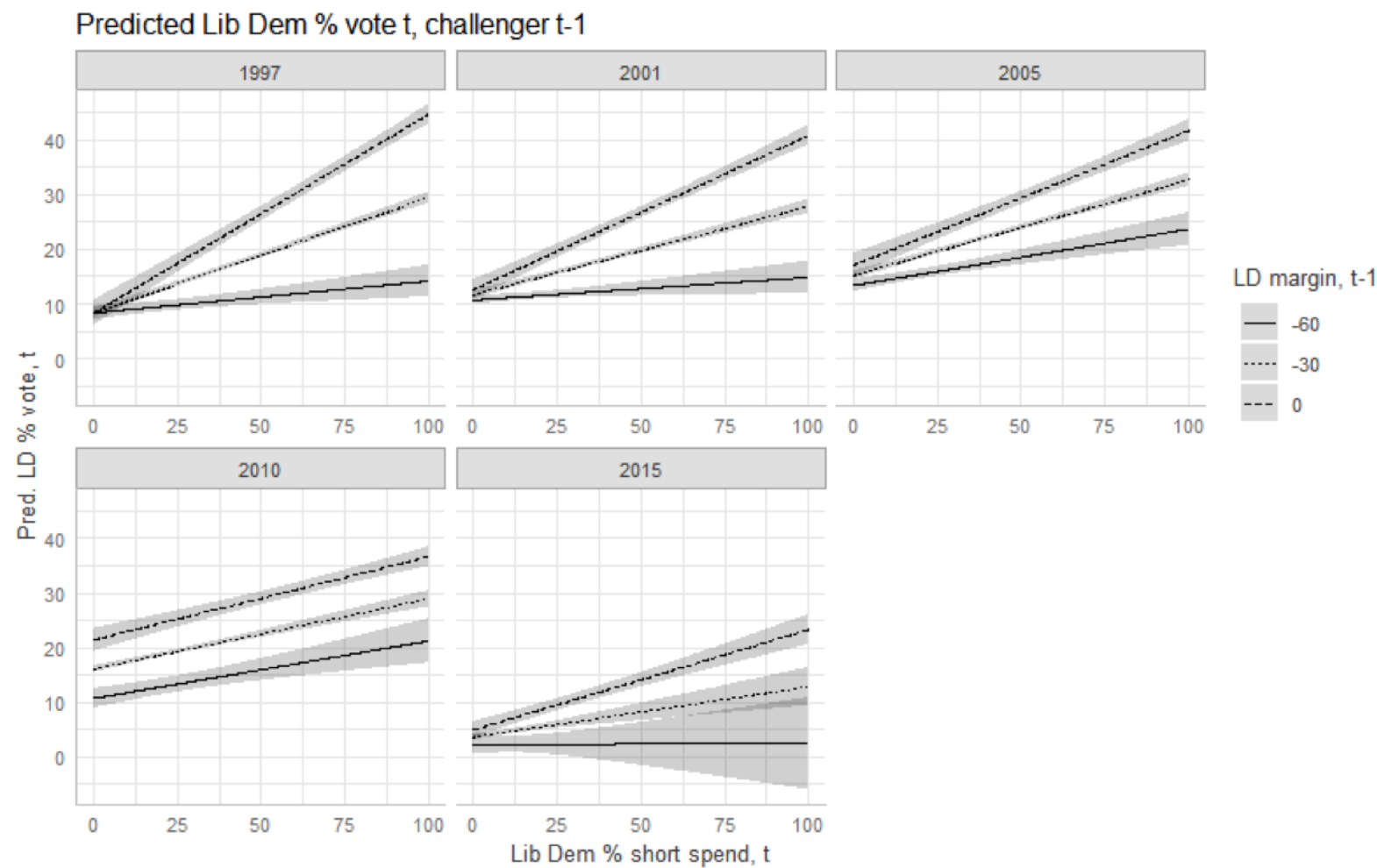


Figure 5: Predicting Conservative vote share in seats where the party is an incumbent, 1997-2015: Visualising interactions

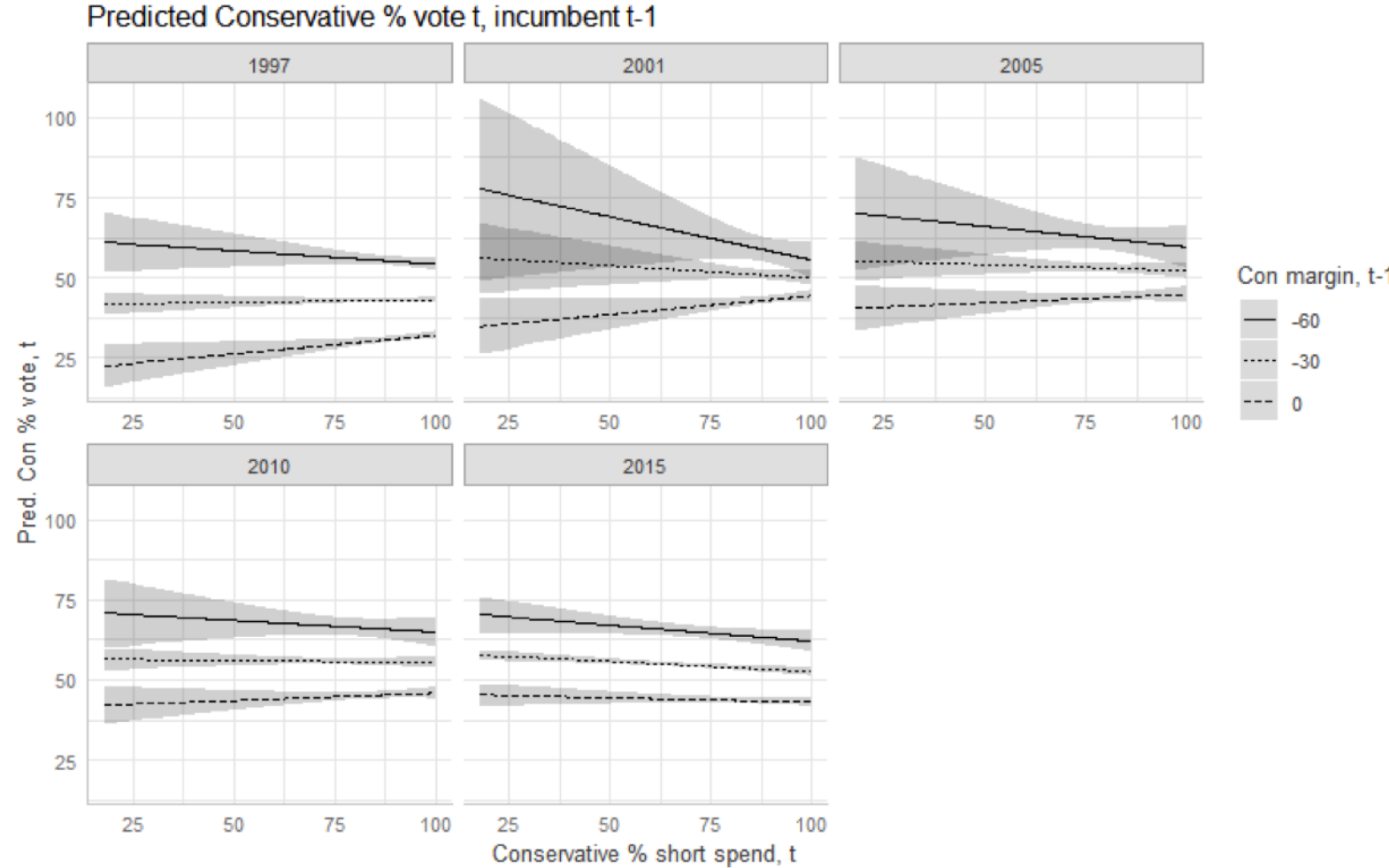




Figure 6: Predicting Labour vote share in seats where the party is an incumbent, 1997-2015: Visualising interactions

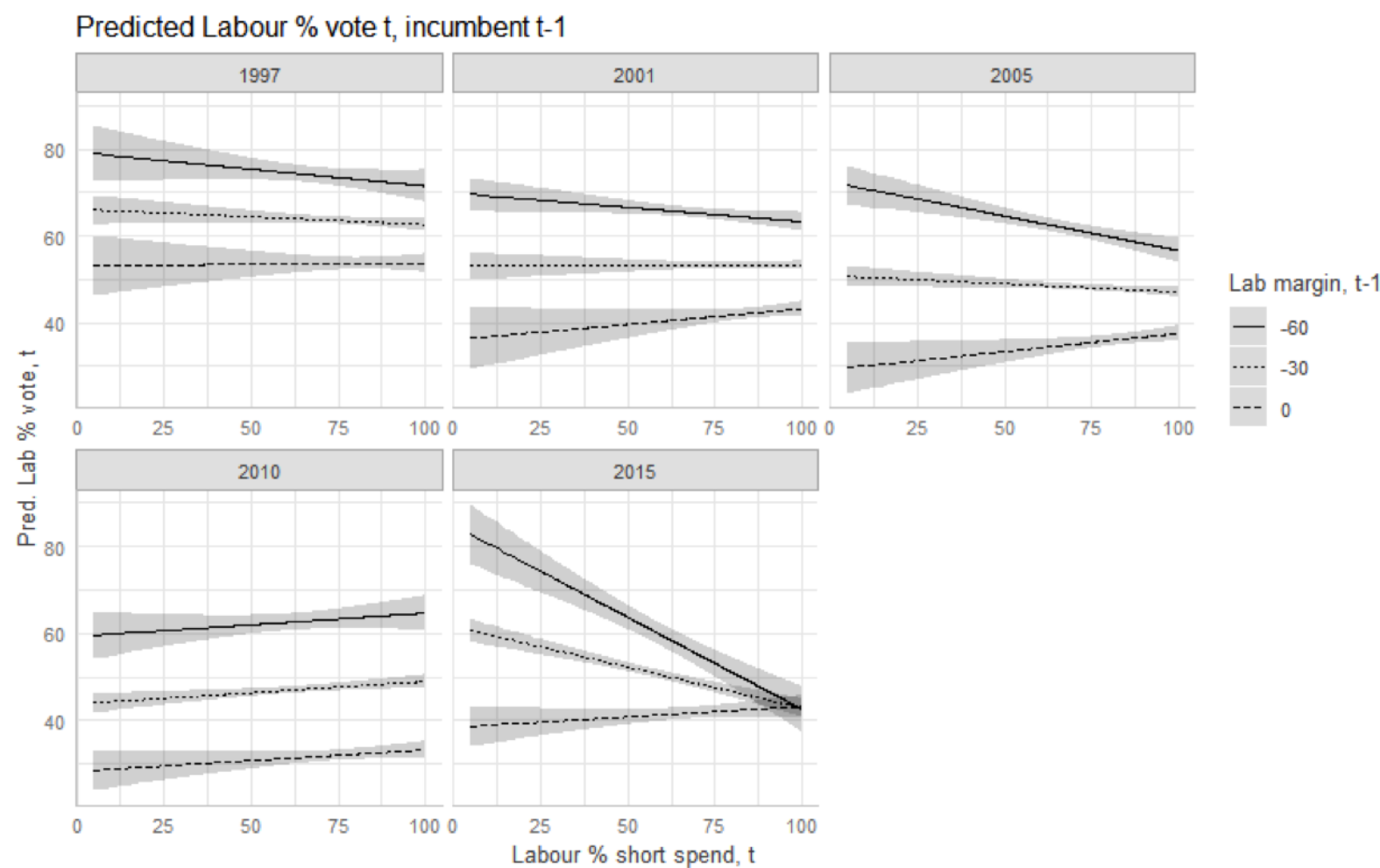


Figure 7: Predicting Liberal Democrat vote share in seats where the party is an incumbent, 1997-2015: Visualising interactions

